

Multimedia Appendix 1

Figure 1. Neutral Motivation Group Card

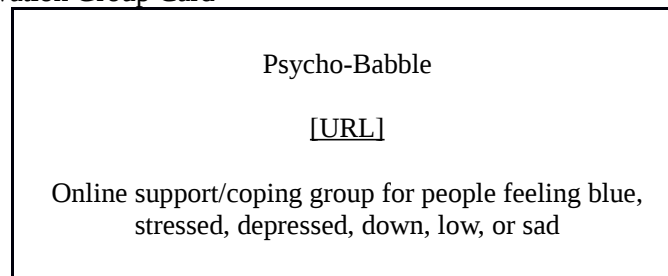


Figure 2. Internal Motivation Group Brochure

Psycho-Babble

[URL]

A website to help individuals with depression recover.

What is Psycho-Babble?

Psycho-Babble is an online community for people feeling blue, depressed, stressed, down, low, or sad and want to get ideas and information from other people with similar experiences. It is anonymous and interactive; discussion is led by Psycho-Babble users. The site is moderated by a professional in the field of mental health for civility. The site is not monitored for accuracy of information.

Psycho-Babble has already helped hundreds of people find information and support about depression online. Psycho-Babble was created by Dr. Bob Hsiung who is a professor at the University of Chicago. Psycho-Babble includes depression information and support. You can post questions or comments to other users on Psycho-Babble's dozens of message boards or ask Dr. Bob questions. The website includes sections for discussion on medication, therapy, alternative treatments, diet and nutrition, and even politics. You can come to learn, help others, or to just be social. The Psycho-Babble Internet site is not affiliated with the University of Chicago. Johns Hopkins University and the University of Chicago have received a grant from the National Institutes of Health to study methods of referring primary care patients to Internet based social support sites.

If you have any questions about this study, feel free to email Dr. Benjamin Van Voorhees at the University of Chicago. He is the principal investigator of this study. His email address is: [email address]

The discussion at Psycho-Babble is led by Psycho-Babble users, so you can talk about nearly anything. Here are some of the features offered on the Psycho-Babble website:

- Interactive message board moderated by a physician to discuss treatments, medications and therapy with other Psycho-Babble users
- Information on books, website and other resources for learning about psychotherapy and biological treatments

- Social support network for discussing a wide range of issues like faith, health and wellness, grief and mourning and alternative treatments.

Read what some users have said about the site

“This board helps me feel not alone, which is so important to me. If that is the only purpose it serves, well, that sometimes is more helpful to me than a lot of the meds.”

“The board helps a lot in that I can feel a little connected to people who are also suffering, people who don't know me, won't judge me, and who have some darn good advice. After my long battles with mental illness and all the meds I've been on, I feel that I have something of value to offer, and it makes me feel good to pass it on.”

Check out Psycho-Babble today! It's easy, it's fast, and you may just get an answer to that one difficult question or make a few friends.

Your personal username and password are: [username, password]

Once you log on you will be directed to create your own password

Figure 3. External Motivation Group Letter

RE: Internet Depression Support Group Study

Dear [participant name],

I am writing you to thank you for participating in the study “Feasibility Study of Methods of Referral Primary Care Patients with Depression for Internet-Based Social Support”.

I want to encourage you to visit the Psycho-Babble Internet site. I believe you may find the experience of visiting the internet site helpful for you. This Internet site has been designed to be an online support group for people feeling blue, depressed, stressed, down, low, or sad. We hope that you will find information that will help you determine if and what form of treatment you need. Similarly, we hope you find the stories and comments of others who have had similar problems to be encouraging and helpful. Additionally, your comments may be helpful to others.

Please feel free to talk to me or the study staff or the study principal investigator, Dr. Benjamin W. Van Voorhees if you have any questions. The internet site address is: [URL].

Sincerely,

[doctor name], MD

Table 1. Randomization Groups and Participation

	Neutral- Card (A)			Internal -Brochure (B)				
		Mean/ (Percent)	SD (N)		Mean/ (Percent)	SD (N)	2-group <i>p-value</i>	3-group <i>p-value</i>
	<i>N</i>			<i>N</i>				
Sessions								
Number of sessions	¹ 8	1.33	2.11	19	2.95	5.92	.26	.33
Percent of those with at least one session	¹ 8	0.04	0.07	19	0.10	0.19	.26	.33
Time								
Total Time	¹ 8	115.44	333.36	19	74.68	228.13	.25	.17
Minutes logged (Portal)	¹ 8	106.22	324.07	19	56.21	175.66	.26	.24
Minutes logged (ISG)	¹ 8	9.27	26.59	19	18.47	53.24	.92	.20
Minutes per each participant	¹ 8	0.05	0.07	19	0.07	0.07	.25	.17
Time & Sessions								
Minutes per session	¹ 8	20.86	61.83	18	7.61	11.82	.40	.31
Viewing								
Post viewed	¹ 8	5.61	11.75	19	21.58	40.40	.21	.49
Percent who viewed at least once	¹ 8	(44.44)	(8)	19	(587.89)	(11)	.41	.68
Post viewed by each participant who registered	¹ 8	0.21	0.44	19	0.80	1.50	.21	.49
Boards viewed	¹ 8	1.11	1.68	19	1.53	1.87	.36	.52
Boards viewed by each participant who registered	¹ 8	0.04	0.06	19	0.06	0.07	.36	.52
Posting								
Data Submitted	¹ 8	0.39	1.65	19	7.53	15.09	.01	.10
Post attempted	¹ 8	0.17	0.71	19	5.21	11.54	.02	.17
Percent of those who attempted at least once	¹ 8	(65.56)	(1)	19	(42.11)	(2)	.02	.02
Post attempted by each participant who registered	¹ 8	0.01	0.03	19	0.19	0.43	.02	.17
Post posted	¹ 8	0.33	1.41	19	0.26	0.93	.63	.89
Percent of those who posted at least once (ISG)	¹ 8	(65.56)	(1)	19	(110.53)	(2)	1.00	.77
Posts posted by each participant (ISG)	¹ 8	0.01	0.05	19	0.01	0.03	.63	.89
Visitation of Portal & ISG								
Visited Portal or ISG	¹ 8	(565.56)	(10)	19	(798.95)	(15)	.13	.13
Participants who visited Portal	¹ 8	(565.56)	(10)	19	(743.68)	(14)	.25	.26
Participants who registered ISG	¹ 8	(565.56)	(10)	19	(587.89)	(11)	.89	.80
	Neutral Card (A)			External Recommendation (C)				
		Mean/ (Percent)	SD (N)		Mean/ (Percent)	SD (N)	2-group <i>p-value</i>	
	<i>N</i>			<i>N</i>				

Sessions								
Number of sessions	$\frac{1}{8}$	1.33	2.11	13	0.92	1.44	.65	
Percent of those in sessions	$\frac{1}{8}$	0.04	0.07	13	0.03	0.05	.65	
Time								
Total Time	$\frac{1}{8}$	115.44	333.36	13	4.50	8.63	.51	
Minutes logged (Portal)	$\frac{1}{8}$	106.22	324.07	13	4.08	8.30	.51	
Minutes logged (ISG)	$\frac{1}{8}$	9.27	26.59	13	0.23	0.60	.04	
Minutes per each participant	$\frac{1}{8}$	0.05	0.07	13	0.03	0.04	.41	
Time & Sessions								
Minutes used per session	$\frac{1}{8}$	20.86	61.83	13	3.75	8.37	.48	
Viewing								
Post viewed	$\frac{1}{8}$	5.61	11.75	13	4.00	5.74	.60	
Percent who viewed at least once	$\frac{1}{8}$	(44.44)	(8)	13	(46.15)	(6)	.93	
Post viewed by each participant who registered	$\frac{1}{8}$	0.21	0.44	13	0.15	0.21	.60	
Boards viewed	$\frac{1}{8}$	1.11	1.68	13	0.69	0.85	.76	
Boards viewed by each participant who registered	$\frac{1}{8}$	0.04	0.06	13	0.03	0.03	.76	
Posting								
Data Submitted	$\frac{1}{8}$	0.39	1.65	13	0.54	1.94	.81	
Post attempted	$\frac{1}{8}$	0.17	0.71	13	0.23	0.83	.81	
Percent of those who attempted at least once	$\frac{1}{8}$	(65.56)	(1)	13	(87.69)	(1)	1.00	
Post attempted by each participant who registered	$\frac{1}{8}$	0.01	0.03	13	0.01	0.03	.81	
Post posted	$\frac{1}{8}$	0.33	1.41	13	0.00	0.00	.40	
Percent of those who posted at least once (ISG)	$\frac{1}{8}$	(65.56)	(1)	13	(0.00)	(0)	1.00	
Posts posted by each participant (ISG)	$\frac{1}{8}$	0.01	0.05	13	0.00	0.00	.40	
Portal & ISG								
Visited Portal or Registered ISG	$\frac{1}{8}$	(55.566)	(10)	13	(46.156)	(6)	.61	
Participants who visited Portal	$\frac{1}{8}$	(55.566)	(10)	13	(46.156)	(6)	.61	
Participants who registered ISG	$\frac{1}{8}$	(55.566)	(10)	13	(46.156)	(6)	.61	
		<u>External Recommendation</u> (C)			<u>Internal -Brochure (B)</u>			
		Mean/	SD		Mean/	SD	2-group	
	<i>N</i>	(Percent)	(N)	<i>N</i>	(Percent)	(N)	<i>p-value</i>	
Sessions								
Number of sessions	$\frac{1}{3}$	0.92	1.44	19	2.95	5.92	.15	
Percent of those in sessions	$\frac{1}{3}$	0.03	0.05	19	0.10	0.19	.15	
Time								
Total Time	$\frac{1}{3}$	4.50	8.63	19	74.68	228.13	.08	
Minutes logged (Portal)	$\frac{1}{3}$	4.08	8.30	19	56.21	175.66	.09	

Minutes logged (ISG)	$\frac{1}{3}$	0.23	0.60	19	18.47	53.24	.08	
Minutes per each participant	$\frac{1}{3}$	0.03	0.04	19	0.07	0.07	.054	
Time & Sessions								
Minutes used per session	$\frac{1}{3}$	3.75	8.37	19	7.61	11.82	.11	
Viewing								
Post viewed	$\frac{1}{3}$	4.00	5.74	19	21.58	40.40	.50	
Percent who viewed at least once	$\frac{1}{3}$	(46.156)	(6)	19	(57.898)	(11)	.51	
Post viewed by each participant who registered	$\frac{1}{3}$	0.15	0.21	19	0.80	1.50	.50	
Boards viewed	$\frac{1}{3}$	0.69	0.85	19	1.53	1.87	.27	
Boards viewed by each participant who registered	$\frac{1}{3}$	0.03	0.03	19	0.06	0.07	.27	
Posting								
Data Submitted	$\frac{1}{3}$	0.54	1.94	19	7.53	15.09	.03	
Post attempted	$\frac{1}{3}$	0.23	0.83	19	5.21	11.54	.052	
Percent of those who attempted at least once	$\frac{1}{3}$	(7.698)	(1)	19	(42.118)	(2)	.050	
Post attempted by each participant who registered	$\frac{1}{3}$	0.01	0.03	19	0.19	0.43	.052	
Post posted	$\frac{1}{3}$	0.00	0.00	19	0.26	0.93	.23	
Percent of those who posted at least once	$\frac{1}{3}$	(0.001)	(0)	19	(10.531)	(2)	.50	
Posts posted by each participant who registered	$\frac{1}{3}$	0.00	0.00	19	0.01	0.03	.23	
Portal & ISG								
Visited Portal or Registered ISG	$\frac{1}{3}$	(46.151)	(6)	19	(78.959)	(15)	.055	
Participants who visited Portal	$\frac{1}{3}$	(46.151)	(6)	18	(73.684)	(14)	.11	
Participants who registered ISG	$\frac{1}{3}$	(46.151)	(6)	19	(57.898)	(11)	.51	

Table 2. Predictors of Time on Site

Predictor				Model 1		Model 2			
s	<i>N</i>	<i>Mean/</i> <i>(Percent)</i>	<i>SD</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>
Mood									
Baseline PHQ-9	48	13.07	4.44	-0.01	0.07	.92			
Baseline CESD 10	43	9.19	4.64	0.05	0.06	.40			
Demographics									
Age	48	36.44	15.98	0.01	0.02	.65			
Male	48	(31.25)	(15)	0.22	0.63	.73			
College Graduates*	48	(41.672)	(40)	0.34	0.59	.58			
Income	33	45407.70	59496.98	-1.11E-06	6.69E-06	.87			
Social factors									

Loneliness	34	1.18	0.97	-0.30	0.33	.37			
Self-efficacy scale	45	0.44	0.87	0.49	0.35	.17			
Attitudes toward Internet including Self-Determination Theory									
Autonomy seeking									
My identity to be anonymous while I am exploring concerns on the Internet	47	3.85	1.23	0.03	0.24	.89			
I like the idea that I am in control of my experience on the internet	46	4.28	0.78	0.60	0.39	.13			
Connection seeking									
Able to help others by sharing my experiences on the Internet	47	3.53	1.08	0.31	0.27	.25			
Help others by sharing my experiences on the Internet	48	3.63	1.14	0.16	0.26	.54			
Competence Seeking									
Learn about depression treatment on the Internet	48	3.94	0.78	-0.32	0.38	.41			
Able to learn about the experiences of others on the Internet	48	4.06	0.91	-0.18	0.32	.58			
Helpful to learn about the experiences of others on the Internet	47	3.62	1.17	0.11	0.26	.67			
Concern for adverse experiences									
Upset if I read troubling comments about depression on the internet	47	3.21	1.25	-0.16	0.24	.51			
I might read troubling comments about depression on the internet	48	3.67	1.12	-0.58	0.25	.03	-0.62	0.28	.03
Preventive health model questions									
Beliefs about intervention									
Participating in a depression Internet social support site is an important thing to do	46	3.59	1.02	0.58	0.29	.049	0.27	0.32	.40
A depression Internet social support site makes sense to me	46	3.83	1.06	0.16	0.29	.57			
Depression can be treated successfully	46	4.15	0.87	-0.07	0.35	.85			
Going through a depression internet social support site will help me deal with stress or depression	46	3.50	0.98	0.38	0.31	.22			
Attitudes toward intervention									
The benefits of a depression internet social support site outweigh any difficulty	46	3.48	0.86	0.66	0.34	.06			
A depression internet social support site could help me deal with depression	46	3.67	1.06	0.25	0.29	.39			
Help myself overcome depression by visiting a social support Internet site	46	3.37	1.08	0.39	0.28	.17			
Going through a depression Internet social support site is too much trouble	46	2.26	0.80	-0.37	0.38	.34			
A depression internet social support site would be emotionally painful	46	2.17	0.88	-0.23	0.35	.51			
Going to a depression internet social support site would be embarrassing	45	2.04	0.95	0.05	0.33	.87			
I would be better off if I didn't go to this depression Internet support site	46	2.04	0.84	-0.36	0.36	.32			
Social norms									
My close friends support me going to depression social support Internet site	45	2.78	1.13	0.17	0.27	.55			
I want to do what my close friends think I should do	45	2.82	0.98	0.24	0.31	.45			
My immediate family supports me going to a depression Internet social support site	45	2.71	1.25	0.30	0.24	.23			
I want to do what the members of my immediate family think I should do	43	2.98	1.03	0.54	0.30	.08			
Physicians and other health care professionals want me to go to an Internet intervention site	45	3.02	1.20	0.47	0.25	.07			
I want to do what the physicians and other health care professionals want me to do	45	3.40	0.91	0.80	0.32	.02	0.45	0.36	.23
Self-efficacy									
Visiting this depression Internet social support site is an easy thing to do	46	3.89	0.97	0.62	0.30	.047	0.43	0.29	.16
Arranging my schedule to visit depression internet social support site would be an easy thing for me to do	46	4.00	0.79	0.35	0.38	.37			
Transtheoretical Model of Change/MI									
Importance	48	7.38	2.83	0.14	0.10	.17			

Ability	48	6.81	2.73	-0.11	0.11	.32			
Readiness	48	7.81	2.73	0.04	0.11	.72			
Participation in decision making									
Talk to my providers to include my treatment preferences	17	4.12	0.99	0.24	0.47	.61			

Table 3. Predictors of Posts Viewed

				Model 1			Model 2		
<u>Predictors</u>	<i>N</i>	<i>Mean/ (Percent)</i>	<i>SD</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>
Mood									
Baseline PHQ-9	48	13.07	4.44	0.06	0.08	.48			
Baseline CESD	43	9.19	4.64	0.19	0.14	.17			
Demographics									
Age	48	36.44	15.98	0.01	0.02	.67			
Male	48	-31.25	-15	0.97	0.75	.20			
College Graduates	48	-41.67	-40	0.78	0.71	.27			
Income	33	45407.7	59496.98	-8.76e	6.00E+00	6.00			
Social factors									
Loneliness	34	1.18	0.97	0.2	0.34	.55			
Self-efficacy scale	45	0.44	0.87	0.63	0.37	.09			
Attitudes toward Internet including Self-Determination Theory									
Autonomy seeking									
My identity to be anonymous while I am exploring concerns on the Internet	47	3.85	1.23	0.62	0.48	.20			
I like the idea that I am in control of my experience on the internet	46	4.28	0.78	-0.25	0.8	.76			
Connection seeking									
Able to help others by sharing my experiences on the Internet	47	3.53	1.08	0.04	0.42	.93			
Help others by sharing my experiences on the Internet	48	3.63	1.14	-0.01	0.29	.96			
Competence Seeking									
Learn about depression treatment on the Internet	48	3.94	0.78	-0.43	0.41	.29			
Able to learn about the experiences of others on the Internet	48	4.06	0.91	-0.15	0.45	.73			
Helpful to learn about the experiences of others on the Internet	47	3.62	1.17	0.01	0.29	.98			
Concern for adverse experiences									
Upset if I read troubling comments about depression on the internet	47	3.21	1.25	9.67E-04	0.39	1.00			
I might read troubling comments about depression on the internet	48	3.67	1.12	-0.18	0.43	.67			

Preventive Health Model									
Beliefs about intervention									
Participating in a depression Internet social support site is an important thing to do	46	3.59	1.02	0.58	0.49	.24			
A depression internet social support site makes sense to me	46	3.83	1.06	-0.03	0.4	.94			
Depression can be treated successfully	46	4.15	0.87	-0.24	0.64	.71			
Going through a depression internet social support site will help me deal with stress or depression	46	3.5	0.98	0.12	0.47	.81			
Attitudes toward intervention									
The benefits of a depression internet social support site outweigh any difficulty	46	3.48	0.86	0.04	0.39	.92			
A depression internet social support site could help me deal with depression	46	3.67	1.06	-0.39	0.5	.44			
Help myself overcome depression by visiting a social support Internet site	46	3.37	1.08	0.09	0.46	.84			
Going through a depression Internet social support site is too much trouble	46	2.26	0.8	0.37	0.43	.40			
A depression internet social support site would be emotionally painful	46	2.17	0.88	-0.17	0.38	.65			
Going to a depression internet social support site would be embarrassing	45	2.04	0.95	0.56	0.37	.13			
I would be better off if I didn't go to this depression Internet support site	46	2.04	0.84	0.31	0.66	.64			
Social norms									
My close friends support me going to depression social support Internet site	45	2.78	1.13	0.85	0.4	.03	0.13	0.55	.81
I want to do what my close friends think I should do	45	2.82	0.98	0.93	0.53	.08			
My immediate family supports me going to a depression Internet social support site	45	2.71	1.25	0.51	0.34	.13			
I want to do what the members of my immediate family think I should do	43	2.98	1.03	0.3	0.46	.52			
Physicians and other health care professionals want me to go to an Internet intervention site	45	3.02	1.2	0.88	0.33	.01	0.79	0.49	.11
I want to do what the physicians and other health care professionals want me to do	45	3.4	0.91	0.65	0.49	.19			
Self-efficacy									
Visiting this depression Internet social support site is an easy thing to do	46	3.89	0.97	0.71	0.57	.21			

Arranging my schedule to visit depression internet social support site would be an easy thing for me to do	46	4	0.79	0.15	0.66	.82			
Transtheoretical Model of Change/MI									
Importance	48	7.38	2.83	0.16	0.13	.22			
Ability	48	6.81	2.73	0.06	0.15	.68			
Readiness	48	7.81	2.73	0.1	0.13	.43			
Participation in decision making									
Talk to my providers to include my treatment preferences	17	4.12	0.99	0.54	0.7	.44			

Table 4. Predictors of Posts Attempted

				Model 1			Model 2		
Predictors	<i>N</i>	<i>Mean/ (Percent)</i>	<i>SD</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>	<i>Beta</i>	<i>SE</i>	<i>P-value</i>
Mood									
Baseline PHQ-9	48	13.07	4.44	0.32	0.26	.22			
Baseline CESD 10	43	9.19	4.64	0.28	0.15	.06			
Demographics									
Age	48	36.44	15.98	0.04	0.04	.33			
Male	48	-31.25	-15	1.46	1.29	.26			
College Graduates	48	-41.67	-40	-0.58	1.23	.64			
Income	33	45407.7	59496.98	-2.28E-05	3.58E-05	.52			
Social factors									
Loneliness	34	1.18	0.97	-0.77	0.68	.26			
Self-efficacy scale	45	0.44	0.87	1.56	0.76	.04	1.5	0.77	.05
Attitudes toward Internet including Self-Determination Theory									
Autonomy seeking									
My identity to be anonymous while I am exploring concerns on the Internet	47	3.85	1.23	0.13	0.74	.86			
I like the idea that I am in control of my experience on the internet	46	4.28	0.78	-0.41	1.33	.76			
Connection seeking									
Able to help others by sharing my experiences on the Internet	47	3.53	1.08	2.05	1.07	.06			
Help others by sharing my experiences on the Internet	48	3.63	1.14	0.45	0.55	.42			
Competence Seeking									
Learn about depression treatment on the Internet	48	3.94	0.78	-0.23	0.68	.74			
Able to learn about the experiences of others on the Internet	48	4.06	0.91	0.75	1.05	.47			

Helpful to learn about the experiences of others on the Internet	47	3.62	1.17	0.65	0.58	.26			
Concern for adverse experiences									
Upset if I read troubling comments about depression on the internet	47	3.21	1.25	-0.56	0.53	.29			
I might read troubling comments about depression on the internet	48	3.67	1.12	-0.41	0.69	.56			
Preventive Health Model									
Beliefs about intervention									
Participating in a depression Internet social support site is an important thing to do	46	3.59	1.02	0.22	0.59	.71			
A depression internet social support site makes sense to me	46	3.83	1.06	0.17	0.53	.75			
Depression can be treated successfully	46	4.15	0.87	-1.48	1.29	.25			
Going through a depression internet social support site will help me deal with stress or depression	46	3.5	0.98	1.04	1.05	.32			
Attitudes toward intervention									
The benefits of a depression internet social support site outweigh any difficulty	46	3.48	0.86	0.33	0.71	.64			
A depression internet social support site could help me deal with depression	46	3.67	1.06	-0.12	0.74	.87			
Help myself overcome depression by visiting a social support Internet site	46	3.37	1.08	0.17	0.73	.81			
Going through a depression Internet social support site is too much trouble	46	2.26	0.8	0.6	0.89	.50			
A depression internet social support site would be emotionally painful	46	2.17	0.88	-0.45	0.62	.47			
Going to a depression internet social support site would be embarrassing	45	2.04	0.95	0.44	0.53	.41			
I would be better off if I didn't go to this depression Internet support site	46	2.04	0.84	-0.57	0.84	.50			
Social norms									
My close friends support me going to depression social support Internet site	45	2.78	1.13	2.04	1.07	.06			
I want to do what my close friends think I should do	45	2.82	0.98	-0.25	1.09	.82			
My immediate family supports me going to a depression Internet social support site	45	2.71	1.25	1.58	0.75	.04	1.07	0.57	.06
I want to do what the members of my immediate family think I should do	43	2.98	1.03	0.25	1.08	.81			
Physicians and other health care professionals want me to go to an Internet intervention site	45	3.02	1.2	0.81	0.41	.046	0.23	0.43	.60
I want to do what the physicians and other health care professionals want me to do	45	3.4	0.91	1.28	0.67	.06			
Self-efficacy									
Visiting this depression Internet social support site is an easy thing to do	46	3.89	0.97	-0.02	1.02	.99			
Arranging my schedule to visit depression internet social support site would be an easy thing for me to do	46	4	0.79	-9.34E-15	1.59	1.00			
Transtheoretical Model of Change/MI									

Importance	48	7.38	2.83	0.48	0.36	.18			
Ability	48	6.81	2.73	0.11	0.2	.57			
Readiness	48	7.81	2.73	0.65	0.36	.07			
Participation in decision making									
Talk to my providers to include my treatment preferences	17	4.12	0.99	0.94	1.81	.60			